tionnaire was supplemented with a generic instrument, the EuroQol. The aim of the study was to measure the quality of life depending upon severity level of the illness.
METHODS: Adult asthma patients treated in 23 pneumologic ambulatory care units were randomly selected and asked to fill out both the FLA and the EuroQol questionnaires. Separate analyses of the results were carried out for each patient severity level; they covered the average values of the subscales, the correlation and the internal reliability of the questionnaires.
RESULTS: The quality of life of asthma patients correlates strongly to the respective severity level of the illness. This applies to all the examined dimensions of health-related quality of life. The patients of level 3 (serious asthma) in particular achieve values far below average when compared to the total population (42 out of 100, according to EuroQol). By contrast, the subjective quality of life of asthmatics in level 1 is only slightly reduced. The correlation of the FLA subscales as well as of the EuroQol values is high (0.74–0.97).
CONCLUSIONS: The study makes clear that illness progression is associated with high losses of quality of life for the patient. From a health-economic point of view, this is important for the calculation of so-called intangible costs, which are often not quantified in studies on the cost of disease.

L4

CROSS-CULTURAL ADAPTATION OF THE PEDIATRIC ASTHMA CAREGIVER QUALITY OF LIFE QUESTIONNAIRE (PACQLQ) IN 19 COUNTRIES

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Childhood asthma is a disease that affects not only patients but also the quality of life of their parents and caregivers. The PACQLQ is a 13-item scale that was developed in English to measure this impact. Prior to use in an international trial, the original questionnaire underwent cultural adaptation giving rise to 19 language versions. This cultural adaptation process involved the recruitment of a QoL specialist in each country as supervisor of the translation process. First, each QoL specialist discussed the concepts of the original instrument with the developer (EFJ). Native speakers then produced two independent forward translations. These were reconciled and back-translated twice into English. Finally, the translations were tested on a sample target population through in-depth interviews conducted by the senior translator and asthma clinicians. Translation problems included finding conceptual equivalents for typical English expressions and constructions. For example, "to feel frustrated," "to feel upset," and "irritable" either had no literal equivalent or led to misinterpretation in some languages. The item "Did you feel angry that your child has asthma?"—the content of which was found inappropriate in most countries—had to be changed to reflect an emotion more commonly experienced by parents. Finally, the design and the mode of administration of the questionnaire was somewhat problematic in countries where people are not used to completing questionnaires and have a low level of education. Before use in an international trial, rigorous cultural adaptation was essential to produce cross-culturally valid language versions of the PACQLQ. The comparison of answers across countries will clarify whether the impact of asthma on parents or caregivers is similar in all countries. Measurement properties will also have to be confirmed once clinical data are available.

ID1

IS TRIMETHOPRIM RESISTANCE AN OUTCOME OF COMMUNITY ANTIBIOTIC PRESCRIBING?

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Antibiotic resistance is a growing problem in all countries. However, because the precise role of community antibiotic prescribing is undefined, practitioners attribute the problem to overuse of antibiotics by others.
METHODS: Case-control design with incident urine samples (no sample in previous 6 months) from the population of Tayside from 1 July 1993 to 31 December 1995. Cases were subjects from whom trimethoprim-resistant gram-negative bacteria (TR) were isolated. Controls were subjects whose samples grew trimethoprim-sensitive gram-negative bacteria (TS) or showed no bacterial growth (NG). Exposure to risk factors in each group was determined from the MEMO and DARTS record-linkage databases. Logistic regression was used to identify independent risk factors. Demographic variables were age, sex, socioeconomic status, and diabetes mellitus. Exposure variables (in the previous 6 months) were hospitalization and dispensing of the following drugs from community pharmacies: antibiotics, corticosteroids or estrogens.
RESULTS: Of the 9362 incident urine samples used, 380 were TR, 1073 TS, and 7909 NG. The most important risk factors were: exposure to trimethoprim (odds ratio [OR] 3.08; 95% CI 2.48–3.81) or other antibiotics (OR 1.43; CI 1.14–1.80). Additional independent risk factors were age (OR 1.28 for every 10 years after the first decade; CI 1.23–1.35) and prior hospitalization (OR 1.38; CI 1.07–1.79). However, 35% of the TR group had not been exposed to antibiotics or been hospitalized in the previous 6 months.
CONCLUSION: There was a strong link between trimethoprim resistance and community prescribing of trimethoprim or other antibiotics. However, prior hospitalization was an independent risk factor, and 35% of cases were not associated with either risk factor. These data suggest that antibiotic resistance is multifactorial.